Claims

What is claimed is:

1. A connector for connecting a disc drive circuit board to a device outside the disc drive, the connector comprising:

at least one circuit board tab forming part of the circuit board and extending from the circuit board in a first direction, with contact pads being formed on the at least one circuit board tab; and

a housing attached to the circuit board, the housing including at least one housing tab extending from the housing in the first direction, the at least one housing tab being substantially parallel and adjacent to the at least one circuit board tab, such that the at least one circuit board tab and the at least one housing tab together form at least one connecting tab.

2. The connector of claim 1, wherein:

the at least one housing tab has a first major surface facing toward the at least one circuit board tab and a second major surface facing away from the at least one circuit board tab, the first major surface of the at least one housing tab abutting the at least one circuit board tab; and

the contact pads are formed on a surface of the at least one circuit board tab that faces away from the at least one housing tab.

3. The connector of claim 2, wherein the second major surface of the at least one housing tab defines a locking recess for engaging a projection in a receptacle that is connected to the device to secure the connector within the receptacle.

4. The connector of claim 1, wherein the housing further includes a keying protrusion extending in the first direction along an edge of the at least one housing tab and extending substantially normal to the at least one housing tab.

5. The connector of claim 4, wherein:

the at least one circuit board tab includes two circuit board tabs forming part of the circuit board and extending from the circuit board in the first direction, with contact pads formed on the circuit board tabs;

the at least one housing tab includes two housing tabs extending from the housing in the first direction; and

the housing further includes a second keying protrusion, the first aforesaid keying protrusion extending in the first direction along an edge of a first housing tab of the two housing tabs and extending substantially normal to the first housing tab, and the second keying protrusion extending in the first direction along an edge of a second housing tab of the two housing tabs and extending substantially normal to the second housing tab.

6. The connector of claim 4, wherein the at least one housing tab and the keying protrusion adjoin to form a substantially L-shaped protrusion from the housing.

7. The connector of claim 4, wherein the at least one circuit board tab includes a first edge extending in the first direction and an opposing second edge, wherein the keying protrusion is adjacent the first edge, and wherein the housing defines a channel extending in the first direction adjacent the second edge.

8. The connector of claim 1, wherein the at least one circuit board tab extends through a slot defined by the housing.

9. The connector of claim 8, wherein the slot is a window.

10. The connector of claim 1, wherein the housing includes an integral protrusion that mates with a recess in the circuit board to secure the housing to the circuit board.

11. The connector of claim 1, further including a fastener that extends through the circuit board and the housing to secure the housing to the circuit board.

12. A disc drive comprising a rotatable disc, a disc drive circuit board, and a connector for connecting the circuit board to a device outside the disc drive, the connector comprising:

a substantially rectangular circuit board tab forming part of the circuit board and extending from the circuit board tab in a first direction, with contact pads formed on the circuit board tab; and

a housing attached to the circuit board, the housing including a housing tab extending from the housing in the first direction, the housing tab being substantially parallel to and abutting the circuit board tab such that the housing tab and the circuit board tab together form a connecting tab.

13. The disc drive of claim 12, further including a second substantially rectangular circuit board tab forming part of the circuit board and extending in the first direction from the circuit board, with contact pads formed on the second circuit board tab, wherein the housing further includes a second housing tab extending from the housing in the first direction, the second housing tab being substantially parallel to and abutting the second circuit board tab such that the second housing tab and the second circuit board tab together form a second connecting tab.

14. The disc drive of claim 13, wherein the housing further includes a first keying protrusion substantially normal to the first aforesaid housing tab extending in the first direction along an edge of the first housing tab, and wherein the housing further includes a second keying protrusion substantially normal to the second housing tab extending in the first direction along an edge of the second housing tab.

15. The disc drive of claim 13, wherein the first aforesaid circuit board tab extends through a first window defined by the housing and wherein the second circuit board tab extends through a second window defined by the housing.

16. The disc drive of claim 13, wherein the second major surface of the first aforesaid housing tab defines a first locking recess for engaging a projection in a first receptacle and wherein the second major surface of the second housing tab defines a second locking recess for engaging a projection in a second receptacle.

17. The disc drive of claim 13, wherein the housing defines a first channel extending in the first direction adjacent the first aforesaid housing tab for mating with a first receptacle and an opposing second channel extending in the first direction adjacent the second housing tab for mating with a second receptacle.

18. The disc drive of claim 12, wherein the housing includes an integral protrusion that mates with the circuit board to secure the housing to the circuit board.

19. A disc drive having a disc mounted for rotation on a spindle motor, the disc drive comprising:

a printed circuit board; and

means for electrically and mechanically connecting the circuit board to a device outside the disc drive.

20. The disc drive of claim 19, wherein the means for connecting comprises:

electrically conductive contact pads formed on a tab of the printed circuit board; and

means secured to the printed circuit board for positioning the contact pads within a slot of a receptacle connector.

21. The disc drive of claim 20, wherein the means for positioning the contact pads comprises a housing attached to the printed circuit board adjacent the tab of the printed circuit board.